

CH the second stabilizer leg from any of the plurality of desired positions to the fully retracted position.

REMARKS

Reconsideration of the claims is respectfully requested. Claims 1-6 and 8-18 remain in the application with claims 1,11 and 16 being independent claims. No new matter has been added by this amendment.

Specification Objections

1. The Examiner has objected to the disclosure due to several perceived informalities in the Specification. In that regard:

a-b & d) Applicants have amended the Specification on Page 3, lines 2-4 to provide "an" in front of auto-retract in line 2 and to replace manually with "manual" in line 4. Further, Applicants have amended Page 4, line 30 by stating that "Next, the method includes moving the either of the control levers to the third position."

c) Applicants wish to explain the perceived informality in Page 3, line 27 to the Examiner without amendment. The "Disclosure of the Invention" typically is a paraphrase of each of the independent claims. In this instance, "a" main valve is connected with each of the hydraulic cylinders. This verbage indicates that more than one main valve is present and is common claim language. As can be seen in the drawings, main valve 290 & 294 are

connected with the respective hydraulic cylinder 140 & 144. Applicants believe that such a statement is not confusing, given the explanation above and with a review of the drawings.

2. The Examiner has also objected to the Specification for failing to provide proper antecedent basis for the claimed subject matter. Specifically, the Examiner stated the Specification does not provide support for the claim limitation of claim 18, line 11 in that moving the control lever to the second position activates the control switch, time delay, and solenoid detent. Applicants wish to direct the Examiner's attention to Page 10, lines 5-9 wherein the movement of the control levers to the second position is disclosed to activate the control switches 374, timer relay 390 and solenoid detents 360. Therefore, it seems evident that antecedent basis for Claim 18, line 11 is contained within the Specification.

CONCLUSION:

Applicants respectfully submit that the amendments made and the arguments given should overcome the Examiner's objections to the Specification. Therefore, it is respectfully requested that the objections to the Specification be withdrawn.

Claim Objections

3. The Examiner has objected to the claims due to several informalities. In that regard:

f) Applicants have amended Claim 1 to change "manually" to ---manual---.

g) Applicants respectfully disagree with the Examiner on the language used in Claim 4. According to Claim 1, "a control device" is used "for selecting forward or reverse directions of movement for the work machine". According to Claims 4, activating the alarm device includes "selecting the forward or reverse direction of the work machine with the control device". Therefore, Claim 4 is merely reciting the limitation with the antecedent basis provided in Claim 1. It should be obvious that the control device is used to select forward or reverse directions of movement for the work machine. For this reason, no amendment has been made to Claim 4 in this regard.

h) According to the working document that the Applicants are using to address this office action, Claim 4, line 2 does not include the term "wherein". In fact, the term --including-- is already used in line 2. Therefore, no amendment has been made to Claim 4 for the purpose of replacing "wherein" with --including--. Applicants respectfully request that the Examiner ensure that "wherein" is used in Claim 4, line 2 and, if so, would give such information to the Applicants in a subsequent correspondence.

i) Applicants have cancelled Claim 7. Therefore, amendment to line 2 to change "legs" to --leg-- is not needed.

j) Applicants wish to explain the perceived informality in Claim 11, line 17 to the Examiner without amendment. As in the "Disclosure of the Invention", "a" main valve is connected with each of the hydraulic cylinders. This verbage indicates that more than one main valve is present and is common claim language. As can be seen in the drawings, main valve 290 & 294 are connected with the respective

hydraulic cylinder 140 & 144. Applicants believe that such a statement is not confusing, given the explanation above and with a review of the drawings.

CONCLUSION:

Applicants respectfully submit that the amendments made and the arguments given should overcome the Examiner's objections to the Claims. Therefore, it is respectfully requested that the objections to the Claims be withdrawn.

Claim Rejections under § 112

4-5. The Examiner has rejected claims 7-15 under the second paragraph of 35 USC § 112 as being indefinite for failing to particularly point out and distinctly claim the subject matter which Application regards as the invention.

6. In particular, Claim 7 was rejected because the Examiner stated it is unclear how the pressure of the hydraulic fluid is increased as it flows through the pilot valves (lines 27-31) and again as it flows through the spool valve (lines (32-35)). The Examiner stated that a pressure loss and not a pressure gain would be experienced as the fluid flows through the valves. Claim 7 has been cancelled so that further discussion is not necessary.

7. The Examiner stated that Claim 8 is unclear as to what is meant by "utilizing the control lever for moving another stabilizer leg between fully extended and fully retracted positions". In particular, the Examiner stated that

the use of the term "another" throughout the claim is confusing and should be replaced with "other" or "the other". In this regard, Applicants have amended Claim 8 to remove reference to "another" and replace such terminology with --second-- to clarify that the control lever may be used to move a second stabilizer.

8. The Examiner states that the scope of Claim 11 is unclear because it appears that a Jepson format is being used although the traditional language of a Jepson format is not included. Therefore, the Examiner has requested that the scope of Claim 11 be clarified. Applicants apologize for the clarity of Claim 11. However, Applicants intent was not to use a Jepson format. In that regard, Applicants did not intend to positively claim the elements recited in the preamble. As can be seen in line 15, Applicants used the term "connectable" to show the intent that the elements within the preamble are not being positively claimed. If further clarification on the scope of Claim 11 is needed, Applicants respectfully request that the Examiner request such in a subsequent correspondence.

CONCLUSION

Applicants respectfully submit that the amendments made and the arguments given should overcome the Examiner's rejections to the Claims under 35 USC § 112. Therefore, it is respectfully requested that the rejections to the Claims be withdrawn. Further, Applicants respectfully submit that the Claims 8-15 are now in condition for allowance.

Claim Rejections under § 103

9-10. The Examiner has rejected Claims 1-18 under 35 USC § 103(a) as being unpatentable over Phillips in view of Satoh. In particular, the Examiner states that Phillips teaches a work machine according to Applicants' claims. However, the Examiner states that Phillips does not teach using control levers that are normally biased to a neutral position with a first position for extending the respective stabilizer leg while the lever is manually held in the first position, a second position for retracting the respective stabilizer leg while the lever is manually held in the second position, and a retaining means for automatically retaining the lever in a third position for a predetermined period of time in order to retract the respective stabilizer leg to its fully retracted position. However, the Examiner states that Satoh teaches (in the background) the use of a control lever that is normally biased to a neutral position with a first position for extending a car window while the lever is manually held, a second position for retracting the car window while the lever is manually held, and a solenoid detent means for automatically retaining the lever in a third position for a predetermined period of time to retract the car window. Moving the control lever to the first or second position while the auto-retract mode is engaged will interrupt the auto-retract mode. Further, in Claim 12, the Examiner stated that Phillips and Satoh do not specifically teach a time delay mechanism but that such devices are conventional and inexpensive and would have been obvious to one skilled in the art.

Applicants respectfully disagree with the Examiner on the combination of the prior art references. First, there must be a basis in the art for combining the references. The Examiner must be able to point to something in the prior art that suggests in some way a modification of a particular reference or a combination with another reference in order to arrive at the claimed invention. Such is not the case with Phillips and Satoh. In particular, the disclosure in Satoh is specifically drawn to a power window switch without the suggestion that such might be used for stabilizer legs of a work machine. Further, the Phillips reference relates to the continuous operation of various switches to extend and retract various outrigger assemblies with the desire to reduce control valves and the like. However, the Phillips reference does not specifically address the advantage of auto-retraction of the outrigger assemblies through a non-continuous operation.

Additionally, the prior art reference of Satoh is nonanalogous with the claimed invention. Although Section 103 requires full knowledge of the inventor in the prior art within his/her endeavor, it does not require knowledge outside the field of endeavor. Secondly, if outside the field of endeavor, it must be decided whether the reference is reasonably pertinent to the particular problem with which the inventor was involved. In this case, the problems involved with power window actuation are different than stabilizer legs of a work machine, making power window control outside the field of knowledge of one skilled in the art in stabilizer technology. Secondly, the Satoh reference is not reasonably pertinent to the problem addressed by the Applicants in the present case. In the present case, the Applicants wish to

simultaneously retract the stabilizer legs in a manner that avoids continuous operation of a control lever. Further, auto-retraction of the stabilizer legs in such a manner ensures that the operator of the work machine may efficiently drive the work machine after actuation of the auto-retract, thereby increasing productivity. Satoh, on the other hand, deals with the retraction of the power windows only for convenience of the passenger.

Also, in that regard, the combination of prior art references is improper because the prior art does not teach or suggest the problem or its source nor does the prior art give incentive to combine the references in the manner done by the Examiner.

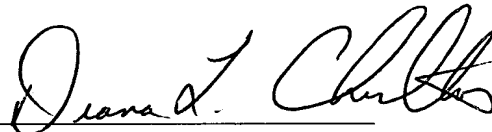
CONCLUSION

For the reasons given, Applicants respectfully submit that the combination of the prior art references is improper. Further, Applicants respectfully request that the rejection of Claims 1-6 & 8-18 under 35 USC § 103(a) should be withdrawn due to the improper combination. Therefore, Applicants respectfully submit that Claims 1-6 & 8-18 are allowable over the prior art of record.

The prior art of record has been reviewed and is believed to be inapplicable and not pertinent to the invention as claimed by the Applicants.

It is respectfully urged that the subject application is in condition for allowance and allowance of the claims in the application is respectfully requested.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Diana L. Charlton", written over a horizontal line.

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Marked Up Copy of Specification and Claims

Title : PILOT HYDRAULIC CONTROL FOR A PAIR OF STABILIZER LEGS
ON a BACKHOE LOADER MACHINE

Application No. : 09/587,544

Atty Docket No. : 00-318

IN THE SPECIFICATION

Please amend the last paragraph of Page 2 (lines 21-35) that continues onto Page 3 (lines 1-9) of the Specification, as follows:

In one aspect of the present invention, a method is disclosed for automatically retracting a stabilizer leg for a work machine. The work machine is operatively associated with a power source and has a control device for selecting forward or reverse directions of movement. The method includes utilizing a control lever for moving the stabilizer leg between fully extended and fully retracted positions. The control lever is normally located in and biased to a neutral position. Next, manually moving the control lever to either of an extend position or a retract position. Then, manually holding the control lever in either of the extend or retract positions to respectively extend or retract the stabilizer leg to any of a plurality of desired positions between the fully extended and fully retracted positions. Next, manually moving the control lever to an auto-retract position. Finally, retaining the control lever in the auto-retract position without further manual[ly] manipulation thereof through a responsive means that overcomes the biasing action of the control lever to facilitate the automatic retraction of the

stabilizer leg from any of the plurality of desired positions to the fully retracted position.

Please amend the last paragraph of Page 4 (lines 9-35) of the Specification, as follows:

In yet another aspect of the present invention, a method is disclosed for automatically retracting a stabilizer leg for a work machine. The work machine is operatively associated with a power source and has a control device for selecting forward or reverse directions of movement for the work machine. The method comprises the steps of utilizing a pair of control levers for moving a pair of stabilizer legs between fully extended and fully retracted positions. The control levers are normally located in a neutral position and movable to first, second, and third positions. The movement of either of the control levers to the first position promotes the movement of a respective stabilizer leg to a plurality of extended positions and the movement of either of the control levers to the second position promotes the movement of the respective stabilizer leg to a plurality of retracted positions. The control levers are biased to the neutral position when in the first, second, or third positions. Next, the method includes moving either of the control levers to the third position. Finally, automatically maintaining either of the control levers in the third position to overcome the biasing action on the control levers for moving the respective stabilizer leg from any of the plurality of extended or retracted positions to the fully retracted position.

IN THE CLAIMS

1. (Amended) A method of automatically retracting a stabilizer leg for a work machine, the work machine operatively associated with a power source and having a control device for selecting forward or reverse directions of movement for the work machine, comprising the steps of:

utilizing a control lever for moving the stabilizer leg between fully extended and fully retracted positions, the control lever being normally located in and biased to a neutral position;

manually moving the control lever to either of an extend position or a retract position;

manually holding the control lever in either of the extend or retract positions to respectively extend or retract the stabilizer leg to any of a plurality of positions between the fully extended and fully retracted positions;

manually moving the control lever to an auto-retract position; and

retaining the control lever in the auto-retract position without further manual[ly] manipulation thereof through a responsive means that overcomes the biasing action of the control lever to facilitate the automatic retraction of the stabilizer leg from any of the plurality of desired positions to the fully retracted positions.

7. (Cancelled) [The method of automatically retracting a stabilizer legs of claim 6, wherein the step of initiating a flow of hydraulic fluid to move from a pump to a hydraulic cylinder includes the step of:

increasing the hydraulic fluid from a first pressure prior to moving through the pump to a second pressure greater than the first pressure after moving through the pump;

increasing the hydraulic fluid from the second pressure prior to flowing through the pair of pilot valves to a third pressure greater than the second pressure after flowing through the pair of pilot valves; and

increasing the hydraulic fluid from the third pressure prior to flowing through the spool valve to a fourth pressure greater than the third pressure after flowing through the spool valve.]

8. (Amended) The method of automatically retracting a stabilizer leg of claim 1, including the step of:

utilizing the control lever for moving [another] a second stabilizer leg between fully extended and fully retracted positions;

manually moving the control lever to either of [another] a second extend or retract position;

manually holding the control lever in either of the [another] second extend or retract positions to respectively extend or retract the [another] second stabilizer leg to any of a plurality of desired positions between the fully extended and fully retracted positions;

manually moving the control lever to [another] a second auto-retract position; and

retaining the control lever in the [another] second auto-retract position without further manual[ly] manipulation thereof through a responsive means that overcomes the biasing action of the control lever to facilitate the automatic

retraction of the [another] second stabilizer leg from any of the plurality of desired positions to the fully retracted position.